

I. AMENDMENTS TO THE CLAIMS:

Please amend claims 1 and 7 as follows, cancel claims 2 and 3 without prejudice, and add new claim 11.

The following listing of claims replaces all prior listings, or versions, of claims in the above-captioned application.

LISTING OF CLAIMS:

1. (Currently Amended) A method for manufacturing a semiconductor device, comprising the steps of:

forming a first film, an oxidation preventive layer that prevents permeation of moisture into the element ~~forming step of forming~~, on a concave and convex portion formed by an element on a semiconductor substrate; ~~an oxidation preventive layer which prevents permeation of moisture into the element;~~

forming a second film, an expansion layer that can be oxidized and expanded by a heat treatment in an oxidation atmosphere ~~forming step of forming~~, on the oxidation preventive layer; ~~an expansion layer which can be oxidized and expanded by a heat treatment in an oxidation atmosphere;~~

forming a third film, an insulating film that can be fluidized by the heat treatment in the oxidation atmosphere ~~forming step of forming~~, on the expansion layer; ~~an insulating film which can be fluidized by the heat treatment in the oxidation atmosphere; and~~

~~an expansion step of subjecting~~ exposing the semiconductor substrate, on which the oxidation preventive layer, the expansion layer and the insulating film have been formed, to the heat treatment in an ~~the oxidation atmosphere, the semiconductor substrate on which the oxidation preventive layer, the expansion layer and the insulating film have been formed, in~~

order to fluidize the insulating film and to oxidize and expand the expansion layer, thereby eliminating bubbles generated in the insulating film,-

wherein the expansion layer is made of a silicide.

2-3. (Cancelled).

4. (Original) The method for manufacturing semiconductor device according to claim 1, wherein the insulating film is a silicon oxide film containing at least one of phosphorus, arsenic, boron, fluorine and a halide.

5. (Original) The method for manufacturing semiconductor device according to claim 1, wherein the oxidation preventive layer is formed of a silicon nitride film.

6. (Original) The method for manufacturing semiconductor device according to claim 1, wherein a pressure of the oxidation atmosphere in the expansion step is atmospheric pressure or more, and a temperature of the heat treatment is 400°C to 800°C.

7. (Currently Amended) A method for manufacturing a semiconductor device, comprising the steps of:

forming a first film, an oxidation preventive layer that prevents permeation of moisture into the element-forming step of forming, on a concave and convex portion formed by an element on a semiconductor substrate;~~an oxidation preventive layer which prevents permeation of moisture into the element;~~

forming a second film, an expansion flow layer that can be oxidized, expanded and fluidized by a heat treatment in an oxidation atmosphere and that has an insulating property

~~forming step of forming, on the oxidation preventive layer; an expansion flow layer which can be oxidized, expanded and fluidized by a heat treatment in an oxidation atmosphere and which has an insulating property; and~~

~~an expansion step of subjecting, exposing the semiconductor substrate, on which the oxidation preventive layer and the expansion flow layer have been formed, to the heat treatment in an the oxidation atmosphere, the semiconductor substrate on which the oxidation preventive layer and the expansion flow layer have been formed, in order to oxidize, expand and fluidize the expansion flow, thereby eliminating bubbles or open pores generated in the expansion flow layer,-~~

wherein the expansion flow layer fills the concave and convex portion.

8. (Original) The method for manufacturing semiconductor device according to claim 7, wherein the expansion flow layer is made of a polycrystalline silicon or an amorphous silicon containing at least one of boron, phosphorus and fluorine.

9. (Original) The method for manufacturing semiconductor device according to claim 7, wherein the oxidation preventive layer is formed of a silicon nitride film.

10. (Original) The method for manufacturing semiconductor device according to claim 7, wherein a pressure of the oxidation atmosphere in the expansion step is atmospheric pressure or more, and a heat treatment temperature is 400°C to 800°C.

11. (NEW) A method for manufacturing a semiconductor device, comprising the steps of:

forming a first film, an oxidation preventive layer that prevents permeation of moisture into the element, on a concave and convex portion formed by an element on a semiconductor substrate;

forming a second film, an expansion layer that can be oxidized and expanded by a heat treatment in an oxidation atmosphere, on the oxidation preventive layer;

forming a third film, an insulating film that can be fluidized by the heat treatment in the oxidation atmosphere, on the expansion layer; and

exposing the semiconductor substrate, on which the oxidation preventive layer, the expansion layer and the insulating film have been formed, to the heat treatment in an oxidation atmosphere, in order to fluidize the insulating film and to oxidize and expand the expansion layer, thereby eliminating bubbles generated in the insulating film,

wherein the expansion layer is made of aluminum, tantalum or an alloy of aluminum or tantalum.